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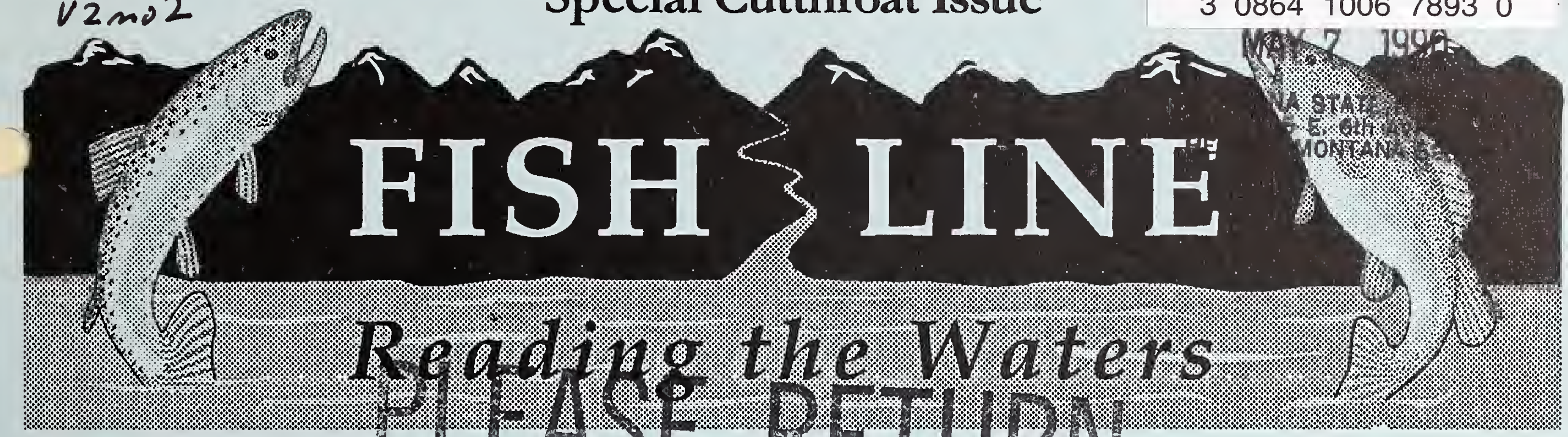
Special Cutthroat Issue



# FISH LINE

## Reading the Waters

MAY 7 1990
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Vol. 2, No. 2

April 1990

### The Future Starts Today

# Please Release Cutthroat Trout

ATTENTION ALL TROUT FISHERMEN! Montana's state fish, the cutthroat trout, needs your help.

Fishermen and the Department of Fish, Wildlife and Parks have answered the call by requesting that anglers voluntarily release the cutthroat trout they catch. The hope is that this voluntary program will help to maintain and, in some cases, improve severely reduced populations, particularly in the state's streams and rivers.

Why are our cutthroat trout populations in trouble? The answer is two-fold: (1) people, and (2) the nature of the fish themselves. Most trout anglers will tell you that cutthroats are the easiest of Montana's seven trout species to catch. In terms of vulnerability to hook and line, cutthroats are a "pushover."

Studies of western cutthroat waters have documented this extreme vulnerability to fishing.

- A study on an Idaho stream has shown that more than 30 percent of a known cutthroat population was caught in just 32 hours of fishing, while only 7 percent of the brook trout were caught.
- Researchers in Yellowstone National Park have estimated that each cutthroat trout in one section of the Yellowstone River was caught an average of 9.2 times per year.
- A Montana study, designed to determine the vulnerability of individual cutthroat in a creek environment, showed that a 12-inch fish was caught, tagged, released, and recaught within three hours. The same study also showed that an 18-inch fish was caught nine times in a seven-month period, which should not be surprising since several other studies have found that larger cutthroats, those most important for reproduction, are most vulnerable.

But the fish's behavior is only part of the reason cutthroats need help.

People, and their activities, whether it be fishing or altering the environment, have had a profound effect on cutthroat populations in our rivers and streams. Anglers spend more than 1.2 million days a year fishing for trout in the state's streams. That kind of fishing pressure points out the potential benefit a voluntary release program can have for cutthroats.

Man has also altered the habitat of the native cutthroat. Habitat deterioration from heavy sediment and dewatered streams, along with blocking of spawning runs by dams and culverts, has contributed to reduced populations.

Past introductions of rainbow and brook trout into native cutthroat waters also have affected cutthroats by increasing competition and hybridization.

Since the cutthroat trout readily hybridizes with rainbow trout, it is often difficult to recognize.

If you fish where cutthroats are found, check the throat area of all the trout you catch for the distinguishing red-colored slashes characteristic of the cutthroat. Cutthroats also generally lack the prominent pink or red midside band of color found on rainbows. The pattern of black spots on the cutthroat's body is more dense on its upper body and tail area, while rainbows have a more uniform spotting pattern.

Because it would not be practical to enforce a catch-and-release regulation for a species that often hybridizes with rainbow trout, and as a result is difficult to identify, anglers and FW&P have opted to encourage a voluntary release program for stream-dwelling cutthroats. In some areas, however, there are special regulations **requiring** catch-and-release fishing for cutthroats and/or all trout. Check your fishing regulations for more specific details.

Catch-and-release fishing can provide more than just the satisfaction a fisherman experiences when he lets his quarry go. It can benefit the future of the resource, too — but only if it is done correctly. Fishermen who voluntarily plan to release cutthroat trout, or any other fish, should:

- avoid the use of bait. Artificial lures and flies cause far less mortality;
- use barbless hooks;
- play the fish as rapidly as possible; do not play it to total exhaustion;
- keep the fish in water as much as possible when handling and removing a hook;
- remove the hook gently — do not squeeze the fish or put fingers in its gills;

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# Films and Video Tapes Available From the Department of Fish, Wildlife and Parks

The Department of Fish, Wildlife and Parks maintains a library of films and video cassettes available for loan free of charge. Most of the films are kept in Helena, but the Department's seven regional headquarters also have smaller libraries of films and cassettes. Film catalogues are available at each regional office or at the Helena headquarters. The Department covers the cost of shipping these items to you or your organization, but we ask that you pay the return postage.

The films are in 16-mm color or black and white. The video cassettes are 1/2-inch VHS or 3/4-inch. Due to a tremendous demand, most of the films are loaned for a one- or two-day showing period only. The Department wants to reach as many different locations and audiences as possible so everyone can benefit from the educational opportunities available.

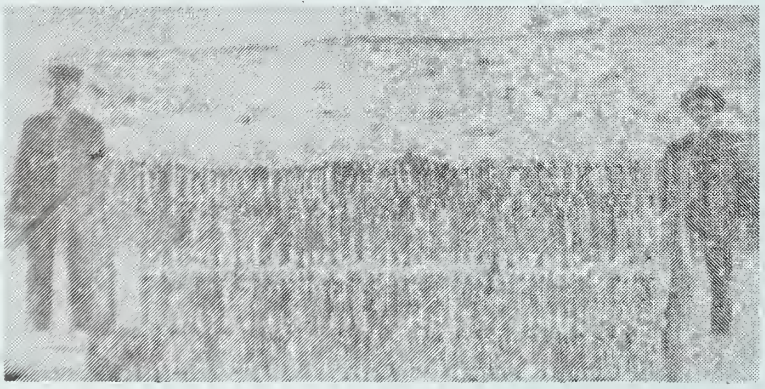
Films and videos are available in the following general categories: fisheries, big game, game birds, conservation, natural history, pollution, ecology, etc.

One of the films available is an award-winning film entitled All for the Rivers, a 24-min., color documentary produced by personnel from FW&P about waters and man. It is about the value and the importance of free untethered rivers and clean water in Montana, how we, man, use them and how we must care for them, how agriculture, rural and urban life, industry, fisheries programs, recreation and aesthetic beauty must all be considered when attempting to keep water clean, clear and productive.

On video tape or 16-mm is a 32-min. film entitled Yellowstone Concerto, which begins with drops of water in the remote mountains south of Yellowstone park and ends at the Missouri River in North Dakota. This film is a tribute to the last free-flowing river in the United States, the Yellowstone River. This award-winning film is dedicated to the preservation of a beautiful river — enjoyable for all ages.

There are some educational short films on fish and fishing, such as A Trout Stream in Winter, 26 min. — A trout's survival in a stream as its habitat changes through the winter; Fishing: Luck or Logic, 30 min. — describes some of the things about fish and fishing which are basic for successful fishermen and shows that fishing is largely a matter of skill rather than luck; The Journey of Kings, 26 min. — The plight of the Columbia River salmon and the regional program designed to protect them. Soar over stunning landscape as the film follows the salmon from their upriver spawning grounds, through mighty dams to the sea and back again.

We hope you will be able to view some of these films, or use them for an organization or school project. To order from Helena, call 444-2426, or contact the regional FW&P office nearest you.



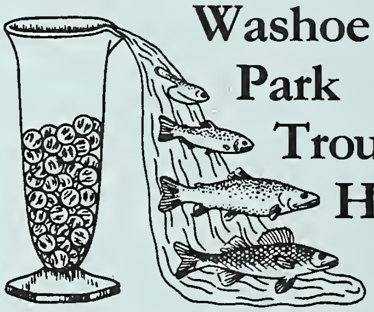
## *One Day's Catch*

**1908, Emigrant, Montana — fish caught in one day at Emigrant bridge in the fall of 1908 — About 275, all natives. There were no Rainbows or Lochs there at that time. Most of the fish were thrown away as there were no deep freezers then.**

**Cutthroat, continued**

- if deeply hooked, cut the line. Do not yank the hook out. Most fish survive with hooks left in them;
- release the fish only after its equilibrium is maintained. If necessary, gently hold the fish upright facing upstream and move it slowly back and forth;
- release the fish in quiet water close to the area where it was hooked.

We hope you enjoy the fishing and recreational activities that Montana's waters provide. With all of us working together, we can and will contribute to improved fishing for all.



# Washoe Park Trout Hatchery

Washoe Park Trout Hatchery in Anaconda, one of nine state-run hatcheries in Montana, is the oldest such facility still in operation.

In 1907, E. P. Mathewson, President of the Montana Fish and Game Commission and General Manager of the Anaconda Smelter, was instrumental in securing a site and building a fish hatchery, residence and ice house. On November 14, 1908, John D. Ryan, President of the Butte, Anaconda and Pacific Railroad granted to the State of Montana, for the sum of $1.00, an irregular-shaped parcel of land a little over four acres in size. Included on the land were pipe lines, conduits, drains, nursery and stock ponds, fences, buildings and structures.

In addition to the physical structures obtained, certain water rights also were granted to the hatchery. Water that was once carried to the facility through wooden flumes and conduits is presently transported via steel pipelines from sources about one-half mile to the west. The water (totalling approximately 4,100 gpm) is collected from three springs and Warm Springs Creek.

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**Hatchery, continued**

Washoe Park has operated as both a broodstock and production station in the past. At present, the main objective is to maintain the state's captive westslope cutthroat trout broodstock. The hatchery's management plan (still under development) calls for the maintenance of five year classes of broodstock that vary between 2,000-4,000 individuals per year class, depending upon anticipated fish egg and fry requests.

Present demand calls for the hatching, rearing and distribution of about 350,000 fry and 350,000 fingerling cutthroat per year. This work is usually accomplished as a joint effort with Murray Springs Hatchery at Eureka. These fish are used to stock high mountain lakes and streams in western Montana and for interagency trade. Eyed eggs in excess of 400,000 per year also are provided to other state and federal hatcheries as part of an exchange program. In 1989, our largest production year since we started this program, Washoe Park produced in excess of 2.1 million westslope cutthroat eggs.

The station's responsibilities also include collection and incubation of eggs from wild populations of brown trout and DeSmet rainbows (taken from Willow Creek Reservoir near Harrison, Montana) in excess of 1.5 million annually.

In February planning began on a major renovation project that will give this tired old hatchery a major face lift and bring it up-to-date with current hatchery standards.

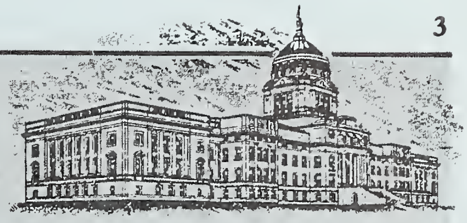
The hatchery's water collection and distribution systems will be improved to ensure a secure and relatively disease- and parasite-free water supply. Presently, the entire water supply is open to surface contamination of these threats.

Work also will include repair and maintenance of some structures to make them more economical to operate. In other cases, antiquated buildings will be replaced with modern structures possessing the features needed to enhance present operations.

Construction is slated to begin in late summer or early autumn of 1990, with completion set by the end of 1991. The renovations are expected to both improve efficiency of operation and increase visitor viewing and educational opportunities at Washoe Park.

## HB 754

## River Restoration Program



March 1st marked the beginning of a new fishing license year and residents of Montana find that licenses have risen fifty cents. For non-residents, it's another dollar. This increase is earmarked to fund House Bill 754, the River Restoration Program, passed by the 1989 Legislature.

The 1989 Legislature recognized that the conservation of rivers and their fisheries is of vital social and economic importance to Montana. With the passage of HB 754, a fund will be established with license dollars and donations to help ensure that rivers and fisheries will continue to provide the highest quality fishing to the state of Montana and its people.

Montana has two laws aimed at protecting and preserving rivers and streams in their natural or existing state. The Stream Protection Act of 1963 and the Natural Streambed and Land Preservation Act of 1975 both require anyone initiating a project that may physically alter or affect a river or stream to receive a permit before they may proceed.

Biologists working for the Department of Fish, Wildlife and Parks (FW&P) are involved with various provisions of both acts. They review all projects that propose to alter a river or stream and often make recommendations to protect or enhance fish habitat.

Prior to initiation of these acts, some projects destroyed fish habitat in miles of rivers. Others were designed without fish habitat protection in mind, and other projects blocked spawning migrations. The River Restoration Program will help enhance fish and wildlife habitat by providing funds for physical projects to improve rivers and their associated lands. The Department will work cooperatively with individuals, landowners, private groups, conservation districts, and local, state and federal governmental agencies to implement specific river restoration projects.

The legislature extended authority to FW&P to make rules for the administration of HB 754. These rules have been developed and will be available for public review and implementation later this spring.

Briefly, the rules provide instructions on how to apply for funds for initiation of a project, where to submit applications, and when they will be reviewed. Some of the potential projects are fish habitat improvement, riparian enhancement, improvements to provide fish passage, stream channel rehabilitation, bank stabilization, irrigation diversion modifications and river corridor clean-up programs.

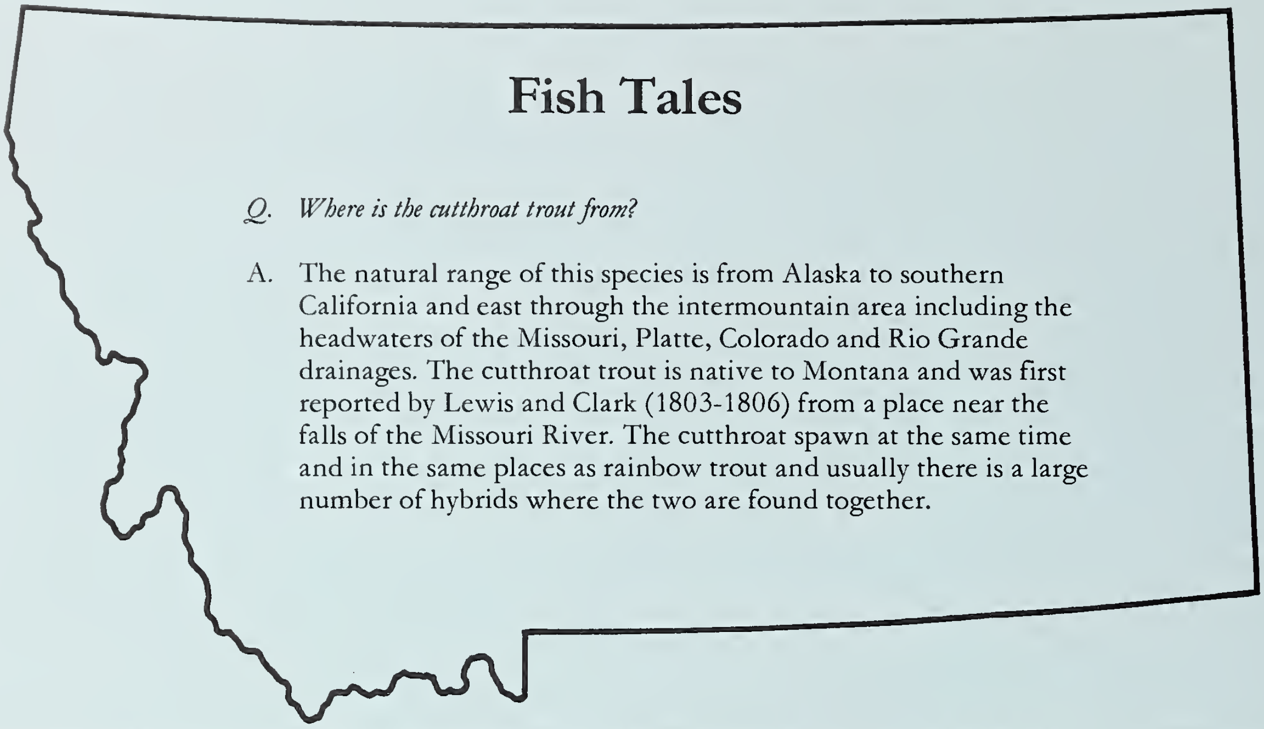
Projects will be evaluated and, if deemed beneficial, approved for funding by FW&P. Criteria for evaluating projects will include:

1. benefits to public fisheries
2. benefits to public use and productivity of other river resources
3. cost-sharing or in-kind services
4. severity of the problem
5. importance of river or stream as fisheries habitat
6. local support for the project
7. potential for statewide application
8. access for public fishing on or near the project area.

Other sections of the rules deal with permit applications, project inspections, payment and project ownership, maintenance and evaluation. The Department will keep records on each funded project and prepare a yearly report.

In past years, FW&P has administered small budgets for river restoration work but funding has been unreliable. The present program will ensure that about $110,000 per year is available for restoration projects. The first projects available for funding will be reviewed in September 1990. If available funds are not spent within a budget year, the unspent money is simply carried over to the next year.

The River Restoration Program is an important step toward bettering Montana's river resources and all those involved with them. Your next river activity, whether it's the fish you catch, the eagle you watch soaring overhead, the deer you see grazing nearby, or the river environment you admire, may be the result of this program.



## Fish Tales

*Q. Where is the cutthroat trout from?*

A. The natural range of this species is from Alaska to southern California and east through the intermountain area including the headwaters of the Missouri, Platte, Colorado and Rio Grande drainages. The cutthroat trout is native to Montana and was first reported by Lewis and Clark (1803-1806) from a place near the falls of the Missouri River. The cutthroat spawn at the same time and in the same places as rainbow trout and usually there is a large number of hybrids where the two are found together.

If you would like to share your views or offer suggestions, please send them to us at **FISH LINE,** Department of Fish, Wildlife and Parks, Fisheries Division, 1420 East Sixth Avenue, Helena, MT 59620.

*Fish and Game Commissioners*
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***Ron Marcoux,*** *Deputy Director*
***Pat Graham,*** *Associate Director*
***Larry Peterman,*** *Administrator*
*Fisheries Division*

## Calendar of Events **April 1990 - June 1990**

| | |
|---|---|
| April 5-6, 1990 | Fish and Game Commission Meeting, Great Falls<br>Smith River Boat Camp leases. |
| May 11-12, 1990 | Fish and Game Commission Meeting, Bozeman<br>Tour Fish Technology Research Center. |
| May 19, 1990 | Opening Fishing Season for Streams. |
| June 4-10, 1990 | National Fishing Week. |
| June 22-23, 1990 | Fish and Game Commission Meeting, Helena<br>Final quotes for moose, sheep, goat and lion. |

FRIENDLY REMINDER: NEW FISHING LICENSES WERE REQUIRED MARCH 1!

*Produced by the Helena Fisheries Division of the Department of Fish, Wildlife and Parks.*

MONTANA STATE UNIVERSITY
BOZEMAN, MT 59717-0001

Montana Department of Fish, Wildlife & Parks